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21ST CENTURY COMMUNITY LEARNING CENTERS PROGRAM FISCAL YEAR 2019 YEAR END REPORT

December 2020

MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

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Introduction

The following report provides information on the fiscal year 2018-2019 (FY19) 21st Century Community Learning Centers (21st CCLC) grant program. In particular, it examines program information related to participation, activities, hours of service, and details the results of the Survey of Academic Youth Outcomes (SAYO) evaluation tool. SAYO was developed by the Massachusetts Department of Elementary and Secondary Education (DESE) and the National Institute of Out-of-School Time (NIOST) to track information on the effect participation in 21st CCLC programs has in increasing student achievement, as well as to provide feedback for ongoing program improvement.

Overall, the data collected indicates that **students in Massachusetts 21st CCLC improved Social-Emotional Learning (SEL) Skills and Academic Performance.**

Moreover, data indicates that 21st CCLC programs may help reduce opportunity and achievement gaps as well as contribute to decreasing high school drop rates*. It can be seen from the data regarding 21st CCLC participating students that members of the subgroups included in the Department's accountability system (students with disabilities, for example) for some outcomes made statistically greater gains than their non-subgroup.*

The results described in this report point to the substantial significant contributions that 21st CCLC programs have made to the academic achievement and youth development of the more than 16,000 students served across the state during FY19.

General Background Information

The Nita M. Lowey 21st CCLC program is authorized under Title IV, Part B of the Elementary and Secondary Education Act, as amended by the No Child Left Behind Act of 2001 and reauthorized by Every Student Succeeds Act (ESSA) of 2015. The program provides federal funding for the establishment of community learning centers that support the implementation of additional learning time through out-of-school time (OST) programming and/or through an expanded day referred to as Expanded Learning Time (ELT). Programming is designed to help close proficiency/opportunity gaps, increase student engagement, support social and emotional learning, and promote college and career readiness and success.

Additional learning time, for the purposes of Massachusetts 21st CCLC grants, is generally defined as follows:

- Out-of-School-Time (OST) — structured programming held outside of the regular school day, week and/or year for a selected group of students.
- Expanded Learning Time (ELT) — adding at minimum 180 hours to the required school day, week and/or year for all students enrolled and 120 hour summer program for a select group of students. The ability to support ELT programming through 21st CCLC funding was added a result of ESEA approved flexibility and the newly authorized ESSA.

Grants are awarded on a competitive basis for up to three years. Grantees meeting all requirements may apply yearly for continuation funds until the three grant cycle is completed.

Grantees in their final year of funding are eligible to apply, though a competitive process, for an Exemplary Programs grant, generally at 85% of their current grant award. The goal of the Exemplary Programs grant is to expand and enhance a statewide network of high quality 21st CCLC programs that serve as resources and mentors. Applicants must be able to demonstrate continuous program improvement and their ability to sustain programming at the same or increased levels.

Program Goals

To support increased student engagement by increasing motivation to learn through ***culturally responsive***, ***interactive***, ***relevant***, and ***engaging*** programming that includes high quality Project Based Learning (PBL) that is aligned to the Department of Elementary and Secondary Education's (Department) goals and strategies. This is accomplished through the

- Implementation of well rounded, ***interactive***, ***relevant***, and ***engaging*** teaching and learning that meets the specific academic, social emotional learning, and developmental needs of students;
- Effective use of data to design programming that addresses student needs and interests.
- Use of data to demonstrate continuous program improvement efforts.
- Development of systems of support and programming that leverages the knowledge, strengths, and assets of students, families, educators, and the community.
- Development of engaging summer programming that helps prevent and address the summer learning slide and helps students transition successfully into elementary, middle, and high school.
- Development of effective family engagement strategies that are culturally responsive, collaborative, and demonstrates an understanding of different languages, norms, and
- Development of sustainable models for supporting additional quality learning time.

Massachusetts 21st Century Community Learning Centers Executive Summary

FY19 Report

Key Takeaway: Students in Massachusetts 21st Century Community Learning Centers improved Social-Emotional Learning (SEL) Skills and Academic Performance

Data in this report is from the Survey of Academic and Youth Outcomes (SAYO) evaluation tool, developed by the Massachusetts Department of Elementary and Secondary Education and the National Institute on Out-of-School Time. SAYO is a research-based evaluation system that assesses changes in youth that are associated with participation in high-quality academic enrichment programs that are likely to occur over a one-year period.

More than **16,000 students at 140 sites** were served by MA 21st CCLC in 2018-19.

Students in 21st CCLC come from diverse racial and ethnic backgrounds and educational experiences. They attend schools that demonstrate financial need.

- 85% at Title I schools; 60% economically disadvantaged
- 20% English Learners
- 20% Students with Disabilities
- 50% Hispanic or Latino
- 30% White
- 10% Black or African American
- 6% Asian
- 4% Multirace-Non Hispanic

On average, students **improved their SEL skills** across all measured domains.

The SEL skill analyses used data reported by OST program staff and school teachers.

- Across all SEL areas, the majority of students (> 50%) increased their SEL skills as reported by program staff and school teachers
- Both staff and teachers reported improved SEL skills in students enrolled in 21st CCLC programs. Staff reported the most change in **Critical Thinking** and teachers reported the most change in **Adult Relationships**
- At the end of the school year, teachers and staff reported similar SEL scores for each student

Special Populations

The majority of students in special populations who are served by 21st CCLC showed growth in relationship and leadership skills.

These Special Population analyses used data reported by OST program staff.

65% of students receiving special education services increased their Relationships with Peers

74% of students receiving special education services improved their Relationships with Adults

61% of students learning English increased their Leadership Skills

All students increased their **Engagement in Learning**, with amount of change varying by race, income, and gender.

Race differences: Hispanic students' scores were the highest at the beginning of the year and were comparable to white peers' scores at the end of the year. Black students showed the most growth over the year and had the highest scores at the end of the year.

Income differences: Economically disadvantaged students' scores were lower at the beginning and at the end of the year. Their scores showed slightly more growth than their peers who were not economically disadvantaged.

Gender differences: Female students' scores were higher at the beginning and end of the school year. Female and male-identified students showed comparable growth.

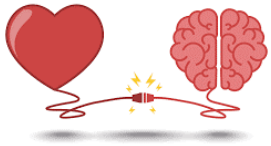
Program Experiences Promote Youth Competence and Skills

Students who reported more positive program experiences were also more likely to report a higher **Sense of Competence** Academically and with Peers.

Students who reported more positive program experiences were also more likely to report that the program supported the development of their **Academic and Social-Personal Skills**.

Competence and Skills analyses used data reported by students.

All five program experiences were positively associated with students' Sense of Competence and students' retrospective reports that the program supported their Academic and Social-Personal Skills.



Students who reported a more supportive social environment were also likely to report feeling **more competent learning.**

A Supportive Social Environment had the strongest association with Sense of Competence as a Learner.

Students who reported a more supportive social environment and more opportunities for leadership were also likely to report feeling **more competent in their interactions with peers.**

A Supportive Social Environment, and Leadership/Responsibility had the strongest associations with Sense of Competence with Peers.

Students who reported feeling more challenged were also more likely to report that **the program supported the development of their academic skills.**

Feeling Challenged had the strongest association with students reporting feeling that the program supported their Academic Skills development.

Students who reported more enjoyment and engagement, and a more supportive social environment, were also likely to report that **the program supported the development of their social-personal skills.**

Enjoyment and Engagement and a Supportive Social Environment had the strongest association with students reporting feeling that the program supported their Social-Personal Skills development.

SEL Skills Promote Academic Progress

Students' change in SEL skills was related to their change in ELA and Math performance relative to grade-level standards.

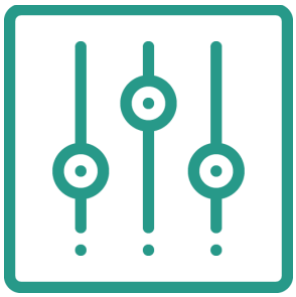
Academic Progress analyses used data reported by school teachers.

Students who showed more change in **Communication** skills were also likely to improve their academic performance in ELA.

Change in Communication Skills was positively associated with change in ELA scores.

Students who showed more change in **Critical Thinking** skills were also likely to improve their academic performance in ELA.

Change in Critical Thinking was positively associated with change in ELA scores.



Students who showed more change in **Self-Regulation**, were also likely to improve their academic performance in Math.

Change in Self-Regulation was positively associated with change in Math scores.

Students who showed more change in **Perseverance** were also likely to improve their academic performance in Math.

Change in Perseverance was positively associated with change in Math scores.

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Massachusetts Department of ELEMENTARY & SECONDARY EDUCATION

1.PROGRAM INFORMATION

STUDENT DEMOGRAPHICS

- 85% Attend Title I Schools
- 60% Economically Disadvantaged
- 26% English Language Learners
- 20% Receive Special Education Services
- 50% Female, 50% Male
- 50% Hispanic
- 30% White
- 10% Black
- 6% Asian
- 4% Multiracial

SCHOOL ATTENDANCE: Students enrolled in MA 21st CLCC attended school 95% of the year.

Table 1.1 OST Attendance FY19

	School Year		Summer	
	Mean: 159 hours	Median: 133 hours	Mean: 113 hours	Median: 108 hours
	N	%	N	%
<50 Hours	1695	17%	616	11%
51- 100 Hours	2067	20%	1934	34%
101-200 Hours	3625	35%	2674	47%
201- 300 Hours	1883	18%	500	9%
301 + Hours	951	9%	17	0%
Total	10221	100%[1]	5741	100%

Source: Grant recipient reports.

Note: This data does not include students who participated in 21st CCLC ELT programs where a minimum of additional hours beyond the state required hours was required for all students.

ACADEMIC SUBJECTS/ACTIVITIES OFFERED

During FY19, all 21st CCLC program sites provided comprehensive programming by offering a wide variety of academic enrichment activities. Almost all districts offered a homework/academic support component during the school year (replaced by learning skills during the summer), and many focused on helping students develop specific mathematics and English language arts skills. See below for a sampling of the academic subjects and activities that were offered at the 21st CCLC sites.

SUBJECTS	ACTIVITIES
English Language Arts (ELA) ● ELA/Verbal Communication ● ELA/Written Communication	• Project Based Learning • Arts (Performing, Music/Dance, Graphic, Drawing/Painting) • STEM • Social Emotional Learning • Arts Based Literacy • SEL/Character Education / Bullying Prevention Education
Mathematics ● Problem Solving ● Reasoning ● Communication	
Science	

[1] Percentages were rounded to whole numbers.

Social Science	• College/Career Preparation • Culinary Arts • Entrepreneurial • Family Engagement • Health & Wellness • Homework /Academic Support • Media Technology (Includes Film Making, Writing, Print Media)

EXPANDED LEARNING TIME

In FY19, six districts were awarded to support expanded learning time in 15 schools as part of the required school day for all students during the school year in order to provide creative and engaging academic enrichment opportunities that will help to close proficiency gaps, and support college and workforce readiness and success. Funded schools were required to offer a minimum of 180 additional hours of structured learning time beyond the state required hours for all students as part of their required school year plus 120 (total of 300 hours) for a targeted group of students during the summer. The grantees and schools that received FY19 21st CCLC ELT funding is indicated with an * in Appendix A.

REGIONAL NETWORKS

The purpose of the Regional Networks is to develop and implement capacity building activities that enhance the ability of 21st CCLC programs in particular, as well as out-of-school time (OST) programs in general, to collaborate and coordinate resources across districts/communities. These capacity building activities foster continuous program improvement and support student achievement that furthers the Department's efforts to support effective practices across the state during OST, as well as during the school day.

The Regional Networks (Northeast, Central, Southeast, and West) are managed by experienced Massachusetts 21st CCLC grantees that have demonstrated exemplary practices, and act as coordinators on behalf of their regional networks. Each regional network decides internally who will serve in this capacity. Networks develop capacity building activities and professional development workshops based on the needs of the each of the programs in the individual regions.

ENHANCED PROGRAMS FOR STUDENTS WITH DISABILITIES

The Enhanced Programs for Students with Disabilities grant program was developed in collaboration and coordination and with financial support from the office of Special Education Planning and Policy Development (SEPP).

The purpose of this grant program is to enhance the capacity of current 21st CCLC programs to include students on an IEP into an array of activities designed to complement their school-day programs, advance achievement, and provide opportunities for socializing and participating with peers without disabilities.

In FY19, approximately 4,300 students with disabilities were served, which was 19 percent of the total 21st CCLC population. A full list of the grant recipients and corresponding school(s) that received funding in FY19 is available here: FY19 244 (continuation).

Appendix B displays the MA ESE21CLCC Report: Enhanced Programs for Students on an IEP Grant FY19.

SURVEY OF ACADEMIC YOUTH OUTCOMES (SAYO)

The Department worked with the National Institute on Out-of-School-Time (NIOST) over a three-year period to create the *Survey of Academic Youth Outcomes* (SAYO), an evaluation tool for use by MA 21st CCLC grantees. Results from two rounds of field-testing with over 5,000 students indicated that the SAYO is a valid and reliable instrument for measuring change in youth.

In FY13, the SAYO was piloted in four ELT schools in which SAYO-teacher data was collected on 100 students in each school. The emphasis for the pilot was on implementation, experience and technical performance of the tool. Results of the pilot of the SAYO T showed sufficient reliability and validity that was consistent with findings from use in 21st CCLC OST programs with evidence of change from pre- to post-assessment.

The *SAYO Evaluation System* uses brief pre-participation and post-participation surveys to collect data from school-day teachers and 21ST CCLC staff. The *SAYO Evaluation System* is based on a "menu" approach, meaning that programs collect data on selected outcomes that are aligned with their goals and program practices. Each outcome area is measured by asking school-day teachers and program staff to respond to four or five questions related to observable youth behaviors. These items have been extensively tested and found to work as a single scale that effectively captures the outcome being measured. Survey responses from school day teachers (SAYO-T) and program staff (SAYO-S) are completed for a sample of youth in each program.

The *SAYO Evaluation System* enables 21st CCLC programs to capture information reflecting changes that are (a) associated with participation in a high-quality 21st CCLC programs and (b) likely to occur over a one-year period. Massachusetts requires all 21st CCLC grantees to use the SAYO as a part of their evaluation and reporting efforts. All grantees use SAYO results to indicate the degree to which they have measured positive outcomes among the participants they serve. Grantees select from a list of academic and social emotional learning outcomes and measure what best reflects the focus and goals of their programs.

Academic Outcomes-SAYO Teacher Version (SAYO-T Academic)

The academic section contains two main content areas in which science and social science are expected to be incorporated as well as *homework*, if assistance with this is offered through the program): *ELA and mathematics*. Grantees select and report on the main area that best reflect their program goals and have school-day teachers of students participating in the school year program complete pre-and post-program assessments.

Social and Emotional Learning (SEL) Outcomes-SAYO Teacher Version (SAYO-T)

Grantees are required to select three SEL outcomes: *critical thinking, self-regulation, leadership, perseverance, relations with adults, relations with peers, and engagement.* They are asked to select and report on the three areas that best match the goals of their 21st CCLC program Grantees have school-day teachers of students participating in the school year program report pre-and post-ratings in the three chosen outcomes.

Program Staff Version (SAYO-S)

Using the SAYO-S, grantees are required to collect and report on pre- and post-ratings of students by program staff (which may include school-day teachers if they are working in the funded programs). Grantees must collect responses from staff working with students served during the school year as well as during the summer for the same three SEL outcomes selected as part of the SAYO-T described above.

Youth Version (SAYO-Y)

Between October-December 2018 and March-June 2019, grantees were required to administer an online survey with youth in their 21st CCLC program. The SAYO-Y was designed to collect information from youth in three main areas: *their program experiences, their sense of competence, and their future planning and expectations.*

Assessing Program Practices Tool (APT)

As a complement to the SAYO, the Assessing Program Practices Tool (APT) is an observation instrument developed to assess the extent to which programs are implementing practices congruent with their desired SAYO outcomes. The APT is intended to be a tool that assists grantees with continuous program improvement and with identifying areas for professional development.

2. SEL SKILLS [SAYO – OUTCOMES]

> Today's schools are increasingly multicultural and multilingual with students from diverse social and economic backgrounds. Educators and community agencies serve students with different motivation for engaging in learning, behaving positively, and performing academically. Social and emotional learning (SEL) provides a foundation for safe and positive learning, and enhances students' ability to succeed in school, careers, and life.
>
> *Roger Weissberg, Joseph A. Durlak, Celene E. Domitrovich, and Thomas P. Gullotta, adapted from* Handbook of Social and Emotional Learning: Research and Practice

In the section below, each SAYO SEL outcome is described. The number of students rated on each SAYO outcome varies because programs self-select which outcomes to measure based in student and school level data.

METHOD AND ANALYSIS

The proportion of students who showed positive change, the mean (average) and standard deviation of the pre, post, and change scores are reported as assessed by teachers and staff during the school year, and by program staff during the summer.

The proportion of positive change reported by teachers and staff is reported from the whole sample assessed on the particular SAYO outcome. If students showed positive change from fall to spring, they were counted as having improved on a particular skill, and these numbers were used to calculate the proportion.

The means and standard deviations, and average change[2] are also reported for the whole sample who were assessed on the particular SAYO outcome. The difference between all pre-post scores are statistically significant $p < .001$.

COMMUNICATION SKILLS

Youth are able to effectively express themselves and share their thoughts and ideas with adults and peers. Youth are good listeners to other people's ideas. Note that youth may use gestures or other devices to support communication.

[2] Average changes were rounded to two decimal points.

Teachers reported positive change in 54% of 2761 students. Scores increased from M_{pre}= 3.39 (1.00) in the fall to M_{post} = 3.82 (0.94) in the spring, an average change of 0.42.

Staff reported positive change in 57% of 2820 students. Scores increased from M_{pre}= 3.42 (0.90) in the fall to M_{post} = 3.84 (0.82) in the spring, an average change of 0.41.

Summer staff reported positive change in 65% of 2192 students. Scores increased from M_{pre}= 3.20 (0.88) to M_{post} = 3.71 (0.88), an average change of 0.51.

CRITICAL THINKING

Students are able to engage in disciplined thinking that is clear, rational, open-minded, and informed by evidence. Youth can analyze and evaluate information to form a perspective. They are able to make judgments and think logically.

Teachers reported positive change in 62% of 3693 students. Scores increased from M_{pre}= 3.23(.90) in the fall to M_{post} = 3.64 (.87) in the spring, an average change of .42.

Staff reported positive change in 72% of 3731 students. Scores increased from M_{pre}=3.11(.87) to M_{post} = 3.70 (.82), an average change of .59.

Summer staff reported positive change in 64% of 2094 students. Scores increased from M_{pre}=3.20 (.80) to M_{post} = 3.67 (.82), an average change of .48.

ENGAGEMENT IN LEARNING

Youth show interest and are actively involved in school or OST program activities.

Teachers reported positive change in 58% of 4823 students. Scores increased from M_{pre}= 3.48 (0.91) in the fall to M_{post} = 3.87 (0.89) in the spring, an average change of 0.39.

Staff reported positive change in 62% of 5004 students. Scores increased from M_{pre}= 3.50 (0.87) in the fall to M_{post} = 3.96 (0.79) in the spring, an average change of 0.46.

Summer staff reported positive change in 66% of 3088 students. Scores increased from M_{pre}= 3.39 (0.83) to M_{post} = 3.88 (0.82), an average change of 0.49.

LEADERSHIP

Youth are able to motivate others toward a common goal.

Teachers reported positive change in 59% of 2183 students. Scores increased from M_{pre}= 3.26 (0.92) in the fall to M_{post} = 3.56 (0.89) in the spring, an average change of 0.31.

Staff reported positive change in 69% of 2188 students. Scores increased from M_{pre}= 3.26 (0.90) in the fall to M_{post} = 3.69 (0.83) in the spring, an average change of 0.43.

Summer staff reported positive change in 67% of 1652 students. Scores increased from M_{pre}= 3.30 (0.81) to M_{post} = 3.73 (0.82), an average change of 0.43.

PERSEVERANCE

Youth plan for and pursue reasonable goals to completion in the face of challenges.

Teachers reported positive change in 55% of 2976 students. Scores increased from M_{pre}= 3.33 (0.96) in the fall to M_{post} = 3.66 (0.95) in the spring, an average change of 0.33.

Staff reported positive change in 60% of 2976 students. Scores increased from M_{pre}= 3.39 (0.91) in the fall to M_{post} = 3.77 (0.84) in the spring, an average change of 0.38.

Summer staff reported positive change in 59% of 1634 students. Scores increased from M_{pre}= 3.33 (0.85) to M_{post} = 3.75 (0.85), an average change of 0.42.

RELATIONSHIPS WITH ADULTS

A supportive relationship with an adult is marked by stability, mutual respect, trust, and honesty.

Teachers reported positive change in 68% of 3999 students. Scores increased from M_{pre}= 3.37 (0.93) in the fall to M_{post} = 3.87 (0.77) in the spring, an average change of 0.50.

Staff reported positive change in 72% of 4056 students. Scores increased from M_{pre}= 3.30 (0.93) in the fall to M_{post} = 3.86 (0.74) in the spring, an average change of 0.56.

Summer staff reported positive change in 73% of 3019 students. Scores increased from M_{pre}= 3.29 (0.84) to M_{post} = 3.82 (0.73), an average change of 0.53.

RELATIONS WITH PEERS

Youth interactions are collaborative, fun, and contribute to a positive social environment. These interactions include those who may differ by gender, age, race/ethnicity, ability, or peer group.

Teachers reported positive change in 53% of 3984 students. Scores increased from M_{pre}= 3.73 (0.87) in the fall to M_{post} = 4.08 (0.80) in the spring, an average change of 0.35.

Staff reported positive change in 63% of 3994 students. Scores increased from M_{pre}= 3.62 (0.86) in the fall to M_{post} = 4.10 (0.76) in the spring, an average change of 0.49.

Summer staff reported positive change in 66% of 1737 students. Scores increased from M_{pre}= 3.52 (0.81) to M_{post} = 4.05 (0.76), an average change of 0.53.

SELF-REGULATION

Youth are able to shape their thoughts, behaviors, and emotions to express their needs in a way that matches the needs of the context.

Teachers reported positive change in 57% of 3870 students. Scores increased from M_{pre}= 3.48 (.97) in the fall to M_{post} = 3.78 (.92) in the spring, an average change of 0.31.

Staff reported positive change in 62% of 3892 students. Scores increased from M_{pre}= 3.42 (0.92) in the fall to M_{post} = 3.78 (.83) in the spring, an average change of 0.37.

Summer staff reported positive change in 60% of 2065 students. Scores increased from M_{pre}= 3.40 (0.85) to M_{post} = 3.75 (0.84), an average change of 0.35.

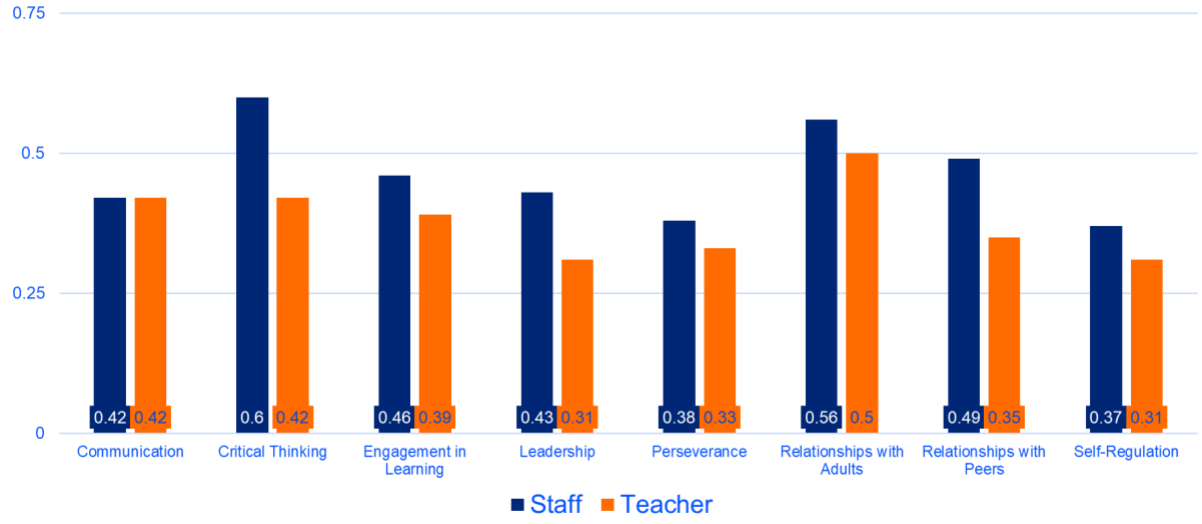
COMPARING CHANGE IN STAFF- AND TEACHER- REPORTED SAYO OUTCOMES

The graph below (Figure 2.1) shows the amount of change in SAYO skills across all eight outcome areas, presented in alphabetical order. The change score is the difference between the post score (spring) and the pre score (fall). In general, staff reported more change in student SEL skills than teachers, however program staff and teacher scores at the end of the school year were comparable (See Table 2). Particular areas where staff-perceived change is higher than teacher-perceived change are: Critical Thinking, Engagement in Learning, Leadership, and Peer Relationships.

Table 2.1 SAYO Staff and Teacher Descriptives

	Staff							Teacher						
	Pre				Post			Pre				Post		
	N	α	M	SD	α	M	SD	N	α	M	SD	α	M	SD
Communication	2824	0.95	3.42	0.91	0.94	3.84	0.82	2764	0.95	3.39	1.00	0.95	3.81	0.94
Critical Thinking	3737	0.97	3.11	0.87	0.97	3.70	0.82	3698	0.97	3.23	0.90	0.97	3.64	0.87
Engagement in Learning	5008	0.96	3.50	0.87	0.96	3.96	0.79	4826	0.96	3.48	0.91	0.96	3.87	0.89
Perseverance	2980	0.97	3.39	0.91	0.97	3.77	0.84	2979	0.97	3.33	0.96	0.97	3.66	0.95
Leadership	2194	0.95	3.26	0.90	0.96	3.69	0.83	2188	0.95	3.26	0.92	0.95	3.56	0.90
Relationships with Adults	4062	0.94	3.30	0.93	0.93	3.86	0.74	4004	0.93	3.37	0.93	0.93	3.87	0.77
Relationships with Peers	3998	0.95	3.62	0.86	0.94	4.10	0.76	3987	0.94	3.73	0.87	0.94	4.08	0.80
Self Regulation	3898	0.97	3.41	0.92	0.97	3.78	0.83	3875	0.97	3.47	0.97	0.97	3.78	0.92

Figure 2.1: Staff and Teacher-Reported Change in SAYO Outcomes



3. SPECIAL POPULATIONS

This section focuses on Leadership and Relationship Skills with Adults and Peers for special populations: students learning English, and students receiving special education services. This section also assesses Engagement in Learning for students who are economically disadvantaged, Black, Hispanic and White students, and female and male. Note: data is also collected for non-binary students, but in FY19 the N was not of sufficient size to include in the results.

Method

SEL Skills and Special Populations: Three SAYO areas were selected which represent interpersonal SEL skills: Relationships with Adults, Relationships with Peers, and Leadership. (See Section 2 of this report for an overview of each scale and corresponding descriptives from the full sample, and Table 2.0 for a list of alphas). Students in these groups made gains across all SAYO outcome areas, the below results represent a sample of their experience during SY18-19.

Engagement in Learning and Demographic Characteristics: Engagement in Learning is a central focus of MA 21st CCLC. In these analyses, Engagement in Learning is reviewed on three different dimensions of the population: (1) for students who are economically disadvantaged; (2) for Black, Hispanic, and White students; and (3) for female and male students.

Data about students who are economically disadvantaged are compared with students who are not economically disadvantaged to assess if this population, the target group for 21st CCLC, is showing growth in SEL Skills which is comparable to their non-economically disadvantaged peers.

Students who are Black, Hispanic, and White are also compared to assess similarities and differences in SAYO scores in fall and spring. Similarly, students who are male and female are compared for similarities and differences growth in SAYO scores. Black, White, and Hispanic students are the three largest race groups, and male and female are the two largest gender groups in the full sample. Other race, ethnic, and gender groups were too small to make an appropriate comparison.

ANALYSIS PLANS

Descriptive Analysis of Students Learning English and Students Receiving Special Education Services: Given the different needs, resources, and challenges of students receiving special education services and students learning English, data are presented as within-group proportions. For example, the proportion of students learning English who improved their Leadership skills is reported from the subsample of only students learning English.

Proportions were calculated based on a student's SAYO-S change score. If they showed a positive change score, they were counted as having improved on a particular skill. Then, a percentage was calculated to represent the proportion of students learning English who increased their Leadership skills and the proportion of students receiving special education services who increased their Relationships with Adults and Relationships with Peers.

Group Comparisons of Engagement in Learning: The economic, gender, and race-related comparisons were analyzed through a Repeated Measures ANOVA which assesses mean differences over time and between groups. Through this analysis, we assess: (1) if there is within group change over time (main effect); (2) if there are between-group differences over time (group effect); and (3) if the groups are changing in different ways over time (interaction). Economic Disadvantage, Gender, and Race were included as factors in the same model, along with covariates, to account for the influence of receiving special education services and/or learning English.

When interpreting these analyses, it is important to note the sample sizes for each group (see Figures 3.1-3.3). Students are relatively evenly split by economic disadvantage or not, and by gender. However, the number of Black students is less than the number of Hispanic and White students.

Students Receiving Special Education Services

74% of Students receiving special education services increased their **Relationships with Adults**, and 64% of these students increased their **Relationships with Peers**.

Students who are Learning English

60% of students learning English increased their **Leadership** skills.

Economic Disadvantage, Race, and Gender

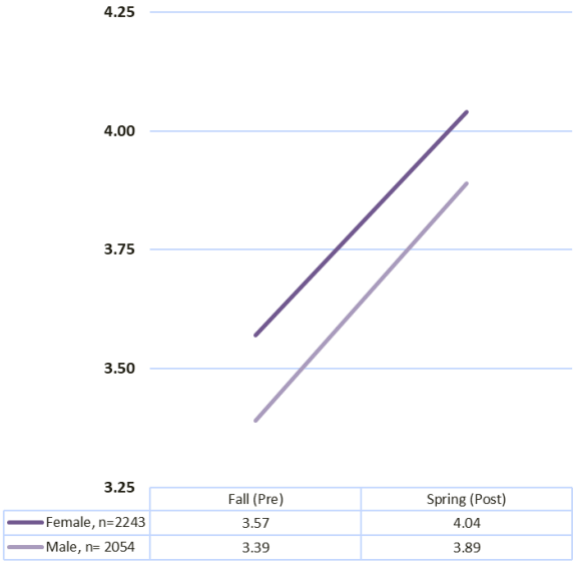
Students' change in **Engagement in Learning** varies by Economic Disadvantage, Gender, and Race.

Results of the RM ANOVA suggest that there is a significant effect of time $F(1,4290) = 621.46$, $p < .001$. All students' Engagement in Learning increases over the school year

There is a *group effect for gender* F(1, 4290)=58.97, p< .001. While Engagement in Learning for male and female students increases at about the same rate, female students show higher Engagement in Learning comparative to male students at the start of the program in Fall and at the end of the program in Spring.

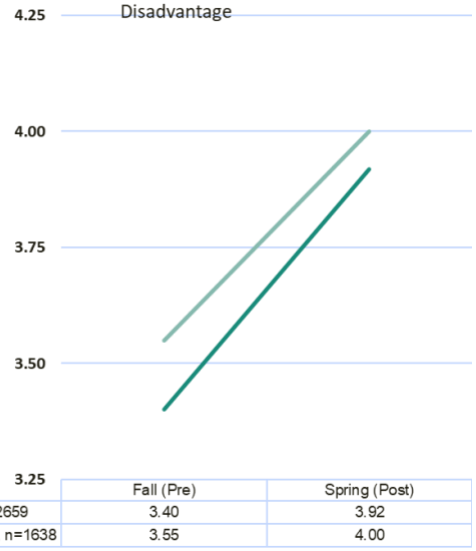
There are also *interaction effects for time*economic disadvantage* F(1,4290)= 5.64, p=.02, and *time*race* F(2,4290)=20.65, p<.001. All students' scores in Engagement in Learning increase over the school year, but students who are economically disadvantaged show slightly more growth than their non-economically disadvantaged peers. Black students show more growth in Engagement in Learning than their Hispanic and White peers, although student's scores increased among all groups.

Figure 3.1: Engagement in Learning & Gender



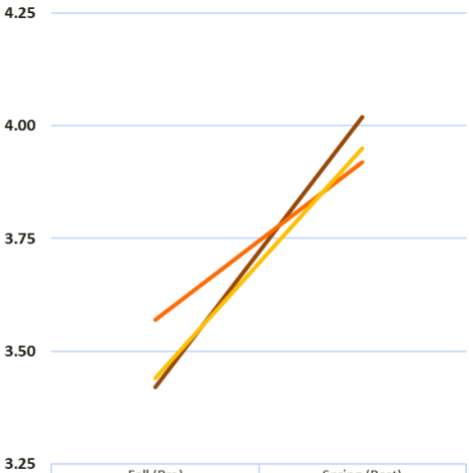
	Fall (Pre)	Spring (Post)
Female, n=2243	3.57	4.04
Male, n= 2054	3.39	3.89

Figure 3.2 Engagement in Learning and Economic Disadvantage



	Fall (Pre)	Spring (Post)
EcoDis, n=2659	3.40	3.92
Not EcoDis, n=1638	3.55	4.00

Figure 3.3 Engagement in Learning & Race



	Fall (Pre)	Spring (Post)
Black, n=545	3.42	4.02
Hispanic, n=2374	3.57	3.92
White, n=1378	3.44	3.95

4. SEL SKILLS PROMOTE ELA AND MATH ACADEMIC PROGRESS

METHOD

This section includes teacher reports of SEL skills and academic performance in ELA and Math. Descriptive findings related to academic progress for students across all MA 21st CCLC programs are presented. Analyses are also reported on subsamples of students to test associations between change in SEL skills and change in Academic progress.

Covariates: Demographic variables are coded comparatively: female students (compared to male students); Asian, Black, Hispanic, and Multiracial students (compared to White students), students enrolled in special education services (compared to those who are not enrolled), students learning English (compared to those not learning English), and Middle and High school students (compared to Elementary). See Section 1, for demographics of the full sample, and Tables 4.1-4.4 for demographics unique to each model. Baseline scores are the categorization of students in Fall (the beginning of the year) as 1 = Poor, 2 = Needs Improvement, 3= Satisfactory, and 4 = Very Good.

SEL Change (SAYO-T): Four SEL areas are evaluated here: Communication skills, and Critical Thinking were selected because of their potential to connect with English Language Arts performance. Perseverance and Self-Regulation because of their potential to support the practices associated with Math performance. SEL Change is calculated as a difference between Spring (Post) and Fall (Pre) SAYO-Teacher ratings. This change score is entered as the predictor variable in the analyses described below. (See Section 2 of this report for an overview of each scale and corresponding descriptives from the full sample, and Table 2.0 for a list of alphas).

Change in Academic Performance: MA 21st CCLC programs select if they will rate students in ELA or Math performance, depending on the focus of their program. In the full sample of students, ELA performance was reported for 4929 students, and Math performance was reported for 2566 students. Academic performance is rated as 1 = Poor, 2 = Needs Improvement, 3= Satisfactory, and 4 = Very Good. Change in academic performance is calculated as the difference between Spring (Post) and Fall (Pre) SAYO-Teacher ratings. This change score is incorporated into the analyses below as the outcome variable.

Sample: Different students are represented in each model described below. Programs select different SAYO and academic foci, therefore each model will have a unique combination of students. Demographics unique to each model are provided in *Step 3* of Tables 4.1-4.4, along with parameter statics.

ANALYSIS PLAN

Descriptive findings about Academic Performance: These findings are representative of the full sample of 21st CCLC Students. Two sets of descriptive findings are presented for both ELA and Math: (1) student grade-level performance in fall and spring are presented as proportions; and (2) proportions of students whose grade-level performance increased, decreased, or showed no change over the course of the year.

Associations between SEL and Academic Performance: In order to test the associations between SEL Skills and Academic Performance, Hierarchical Linear Regressions were conducted. The purpose of these analyses was to evaluate if change in a particular SEL skill

influenced change in the academic outcome. These hierarchical regressions were conducted in three steps. In the first step, demographic variables were incorporated into the model, in the second step baseline academic scores were included, and in the third step the SEL change score was included.

Full results for each step of each regression model is presented in Tables 4.1-4.4. In every analysis, the final model (Step 3), was the best predictor of the respective academic outcomes. Therefore, the results for the final and most useful models are presented in text below. Full results for each model are presented in the corresponding tables.

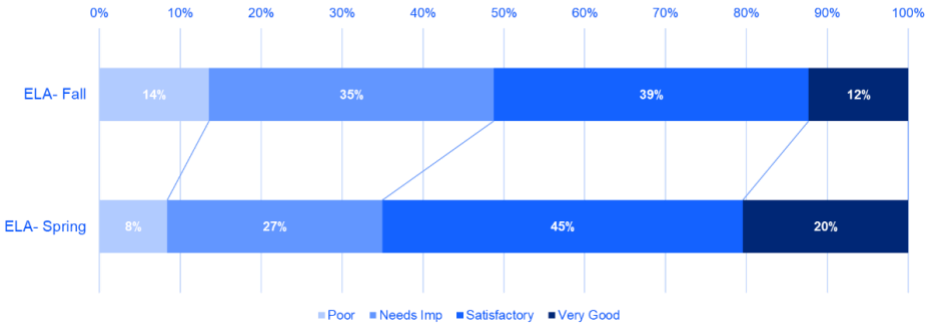
Based on research, theory, and practice we expect that increased SEL skills will predict increased ELA/Math scores.

ENGLISH LANGUAGE ARTS (ELA)

ELA Grade-Level Performance in Fall and in Spring

The proportion of students performing below grade level in ELA decreased in the spring compared to the fall. The proportion of students performing at or above grade level increased in spring. See Figure 4.1.

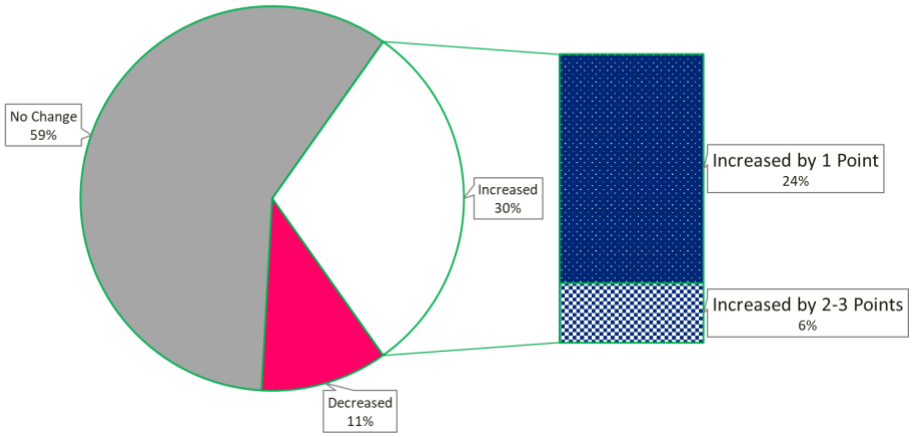
Figure 4.1: ELA Performance in Fall and Spring



ELA Change

In the sample of 4929 students rated by teachers on ELA, 30% of students increased their scores in ELA, 59% showed no change, and 11% of students' scores decreased.

Figure 4.2: ELA Change

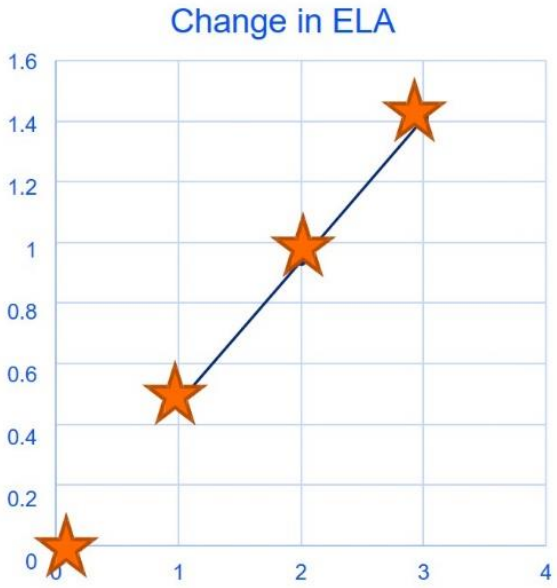


Is change in *Communication* skills associated with change in **ELA performance**?

Communication => ELA

Students who showed more change in **Communication** skills were also likely to improve their academic performance in ELA.

Change in Communication Skills was positively associated with change in ELA scores.



The full model including demographic covariates, baseline ELA scores, and change in communication skills, significantly predicted change in ELA scores (R^2 = .47, F(12, 2073) =154.23 , p<.001).

Covariate Effects: There were very small demographic effects for female, Black, Asian students who showed slightly more change in ELA scores relative to their comparison group. Students receiving special education services and those learning English showed slightly less change in ELA scores than their comparison groups. Students who started with lower baseline ELA scores showed more change in ELA than students who started with higher baseline ELA scores.

SEL Effects: The amount of change in *Communication* skills is positively associated with the amount of change in **ELA**.(β= .36, p<.001). Students who showed more change in Communication skills were also likely to improve their academic performance in ELA. These results suggest that change in communication skills predicts change in ELA beyond demographic characteristics and baseline ELA scores.

Table 4.1. Communication -> ELA: Descriptive Statistics and Parameters

		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
ELA Change		0.28	0.90									
Step 1	Demographics								0.04		10.25	0.000
	Female			0.01	0.04	0.00	0.21	0.830				
	Black			0.18	0.08	0.06	2.41	0.016				
	Hispanic			-0.02	0.05	-0.01	-0.36	0.720				
	Multi-Race			0.09	0.11	0.02	0.86	0.392				
	Asian			0.26	0.07	0.10	3.88	0.000				
	in Middle School			0.04	0.05	0.02	0.71	0.480				
	In High School			-0.05	0.07	-0.02	-0.73	0.466				
	with Special Ed Services			0.30	0.05	0.13	5.84	0.000				
	Learning English			0.21	0.05	0.10	4.56	0.000				
	Economic Disadvantage			0.12	0.04	0.07	3.00	0.003				
Step 2	Baseline ELA								0.30	0.26	83.42	0.000
	Female			0.07	0.03	0.04	2.20	0.028				
	Black			0.19	0.06	0.06	2.87	0.004				
	Hispanic			-0.02	0.04	-0.01	-0.46	0.647				
	Multi-Race			0.06	0.09	0.01	0.67	0.503				
	Asian			0.24	0.06	0.10	4.21	0.000				
	in Middle School			0.07	0.04	0.03	1.68	0.094				
	In High School			-0.02	0.06	-0.01	-0.27	0.789				
	with Special Ed Services			-0.11	0.05	-0.04	-2.28	0.023				
	Learning English			-0.08	0.04	-0.04	-1.94	0.053				
	Economic Disadvantage			0.01	0.03	0.00	0.20	0.840				
	ELA PRE			-0.59	0.02	-0.57	-27.87	0.000				
Step 3	SAYO Change								0.47	0.17	154.23	0.000
	Female	54%	0.50	0.09	0.03	0.05	3.17	0.002				
	Black	10%	0.30	0.15	0.06	0.05	2.70	0.007				
	Hispanic	49%	0.50	0.04	0.04	0.02	1.11	0.266				
	Multi-Race	4%	0.19	0.02	0.08	0.00	0.23	0.816				
	Asian	16%	0.36	0.11	0.05	0.04	2.23	0.026				
	in Middle School	19%	0.39	0.00	0.04	0.00	-0.10	0.919				
	In High School	10%	0.30	-0.02	0.05	-0.01	-0.47	0.638				
	with Special Ed Services	17%	0.38	-0.08	0.04	-0.04	-2.05	0.041				
	Learning English	26%	0.44	-0.08	0.04	-0.04	-2.21	0.027				
	Economic Disadvantage	59%	0.49	-0.01	0.03	0.00	-0.27	0.784				
	ELA PRE	2.50	0.87	-0.45	0.02	-0.43	-23.41	0.000				
	Communication Skills Change	0.42	1.08	0.36	0.01	0.43	25.44	0.000				

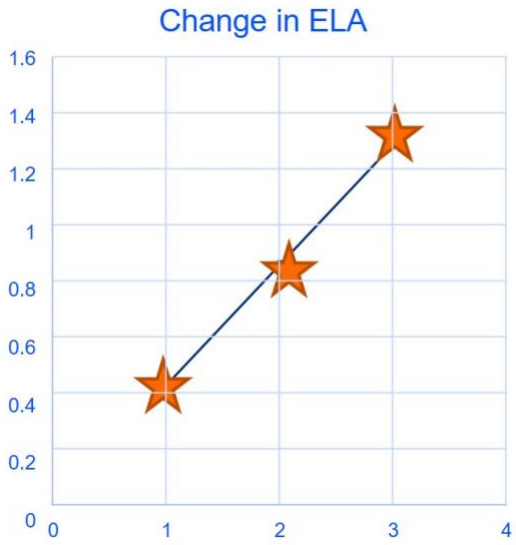
N=2086

Is change in *Critical Thinking* skills associated with change in **ELA performance**?

Critical Thinking => ELA

Students who showed more change in **Critical Thinking** skills were also likely to improve their academic performance in ELA.

Change in Critical Thinking was positively associated with change in ELA scores.



The full model including demographic covariates, baseline ELA scores, and change in Critical Thinking skills, significantly predicted change in ELA scores (R^2 = .39, F(12, 2348) =127.04 , p<.001).

Covariate Effects: There were very small demographic effects for students receiving special education services and economically disadvantaged students; both showed slightly less change in ELA scores relative to their comparison group. Students who started with lower ELA scores showed more change in ELA than those who started with higher ELA scores.

SEL Effects: The amount of change in *Critical Thinking* skills is positively associated with the amount of change in **ELA** (β= .43, p<.001) Students who showed more change in Critical Thinking were also likely to improve their academic performance in ELA. These results suggest that change in Critical Thinking skills predicts change in ELA beyond demographic characteristics and baseline ELA scores.

Table 4.2. Critical Thinking -> ELA: Descriptive Statistics and Parameters

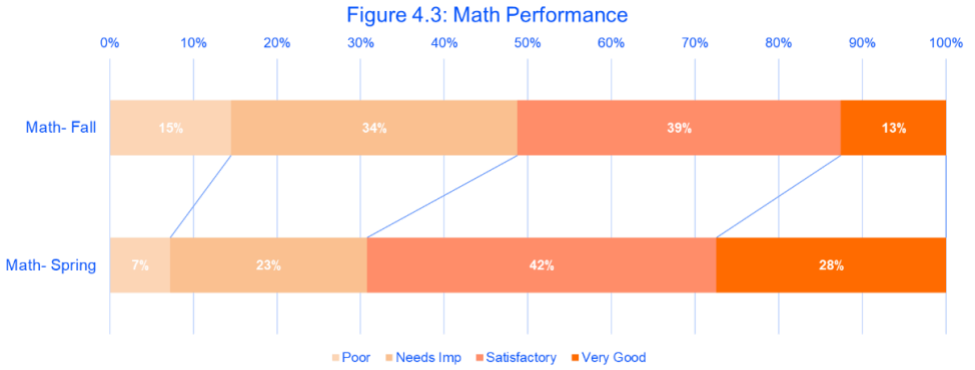
		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
ELA Change		0.25	0.78									
Step 1	Demographics								0.01		3.61	0.000
	Female			0.00	0.03	0.00	0.08	0.939				
	Black			0.02	0.05	0.01	0.35	0.728				
	Hispanic			0.04	0.04	0.02	0.95	0.343				
	Multi-Race			-0.01	0.08	0.00	-0.17	0.862				
	Asian			-0.21	0.08	-0.05	-2.52	0.012				
	in Middle School			-0.09	0.04	-0.05	-2.24	0.025				
	In High School			-0.07	0.04	-0.04	-1.72	0.085				
	with Special Ed Services			0.12	0.04	0.06	2.92	0.003				
	Learning English			0.11	0.04	0.06	2.55	0.011				
	Economic Disadvantage			0.00	0.03	0.00	0.10	0.917				
Step 2	Baseline ELA								0.22	0.21	60.96	0.000
	Female			0.03	0.03	0.02	1.13	0.259				
	Black			0.00	0.05	0.00	0.09	0.926				
	Hispanic			-0.03	0.03	-0.02	-0.95	0.340				
	Multi-Race			-0.03	0.07	-0.01	-0.50	0.618				
	Asian			-0.08	0.07	-0.02	-1.12	0.261				
	in Middle School			0.00	0.03	0.00	0.01	0.995				
	In High School			0.05	0.04	0.02	1.22	0.222				
	with Special Ed Services			-0.23	0.04	-0.12	-6.01	0.000				
	Learning English			-0.07	0.04	-0.04	-1.78	0.076				
	Economic Disadvantage			-0.08	0.03	-0.05	-2.73	0.006				
	ELA PRE			-0.45	0.02	-0.52	-25.00	0.000				
Step 3	SAYO Change								0.39	0.17	127.04	0.000
	Female	51%	0.50	0.03	0.03	0.02	1.30	0.194				
	Black	12%	0.32	-0.01	0.04	0.00	-0.23	0.817				
	Hispanic	40%	0.49	0.01	0.03	0.00	0.16	0.871				
	Multi-Race	5%	0.22	-0.07	0.06	-0.02	-1.18	0.239				
	Asian	4%	0.20	-0.07	0.07	-0.02	-1.07	0.286				
	in Middle School	24%	0.43	0.01	0.03	0.01	0.44	0.658				
	In High School	21%	0.41	0.06	0.03	0.03	1.74	0.081				
	with Special Ed Services	20%	0.40	-0.16	0.03	-0.08	-4.69	0.000				
	Learning English	22%	0.42	-0.05	0.03	-0.03	-1.58	0.113				
	Economic Disadvantage	58%	0.49	-0.09	0.03	-0.06	-3.40	0.001				
	ELA PRE	2.47	0.89	-0.35	0.02	-0.41	-21.54	0.000				
	Critical Thinking Change	0.34	0.81	0.41	0.02	0.43	25.78	0.000				

N=2361

MATH

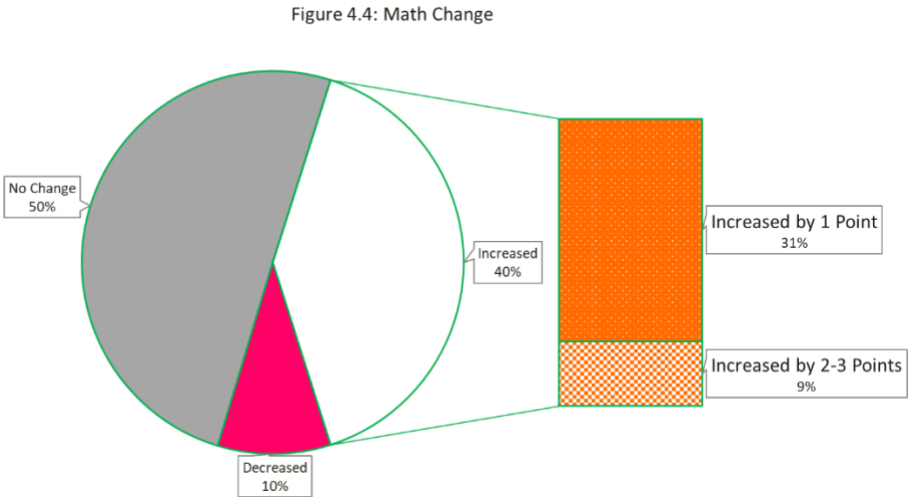
Math Grade-Level Performance

The proportion of students performing below grade level in Math decreased in the spring compared to the fall. The proportion of students performing at or above grade level increased in spring. See Figure 4.3.



MATH CHANGE

In the sample of 2566 students rated by teachers on Math, 40% of students increased their scores in Math, 50% showed no change, and 10% of students' scores decreased.

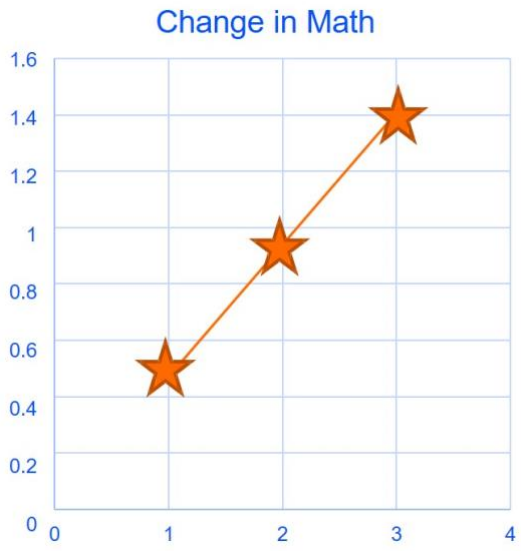


Is change in *Perseverance* associated with change in **Math performance**?

Perseverance=> Math

Students who showed more change in **Perseverance** were also likely to improve their academic performance in Math.

Change in Perseverance was positively associated with change in Math scores.



The full model including demographic covariates, baseline Math scores, and change in Perseverance skills, significantly predicted change in Math scores (R^2 = .48, F(12, 1199) =95.28, p<.001).

Covariate Effects: There were demographic effects for students who were in Middle School, who were learning English, and who were economically disadvantaged; they showed slightly less change in Math relative to their comparison groups. Students receiving special education services showed less change in Math than students not receiving special education services. Students who started with lower Math scores, showed more change in Math than students who started with higher Math scores.

SEL Effects: The amount of change in *Perseverance* is positively associated with the amount of change in **Math** (β= .47, p<.001). Students who showed more change in Perseverance were also likely to improve their academic performance in Math. This analysis suggests that change in Perseverance skills predicts change in Math beyond demographic characteristics and baseline Math scores.

Table 4.3. Perseverance -> Math: Descriptive Statistics and Parameters

		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
Math Change		0.31	0.82									
Step 1	Demographics								0.00		1.00	0.437
	Female			-0.01	0.05	-0.01	-0.25	0.803				
	Black			0.02	0.07	0.01	0.29	0.772				
	Hispanic			0.06	0.07	0.03	0.89	0.372				
	Multi-Race			-0.16	0.12	-0.04	-1.40	0.163				
	Asian			-0.07	0.08	-0.03	-0.85	0.396				
	in Middle School			-0.05	0.06	-0.03	-0.92	0.356				
	In High School			-0.13	0.07	-0.06	-1.83	0.067				
	with Special Ed Services			0.02	0.06	0.01	0.33	0.739				
	Learning English			0.03	0.06	0.01	0.43	0.668				
	Economic Disadvantage			0.06	0.05	0.03	1.14	0.254				
Step 2	Baseline ELA								0.27	0.27	42.36	0.000
	Female			-0.02	0.04	-0.01	-0.40	0.687				
	Black			-0.09	0.06	-0.05	-1.63	0.102				
	Hispanic			-0.06	0.06	-0.03	-1.09	0.276				
	Multi-Race			-0.17	0.10	-0.05	-1.77	0.077				
	Asian			0.10	0.07	0.04	1.44	0.151				
	in Middle School			-0.06	0.05	-0.03	-1.18	0.239				
	In High School			-0.08	0.06	-0.04	-1.36	0.175				
	with Special Ed Services			-0.32	0.06	-0.15	-5.74	0.000				
	Learning English			-0.09	0.05	-0.05	-1.66	0.098				
	Economic Disadvantage			-0.07	0.04	-0.04	-1.59	0.112				
	Math Pre			-0.56	0.03	-0.57	-21.26	0.000				
Step 3	SAYO Change								0.48	0.21	95.28	0.000
	Female	52%	0.50	0.02	0.03	0.01	0.50	0.614				
	Black	23%	0.42	-0.07	0.05	-0.04	-1.41	0.160				
	Hispanic	31%	0.46	0.00	0.05	0.00	0.09	0.930				
	Multi-Race	5%	0.22	-0.12	0.08	-0.03	-1.50	0.133				
	Asian	12%	0.32	0.07	0.06	0.03	1.13	0.259				
	in Middle School	28%	0.45	-0.09	0.04	-0.05	-2.27	0.023				
	In High School	17%	0.38	-0.09	0.05	-0.04	-1.80	0.072				
	with Special Ed Services	18%	0.39	-0.26	0.05	-0.12	-5.60	0.000				
	Learning English	24%	0.43	-0.09	0.05	-0.05	-1.96	0.050				
	Economic Disadvantage	46%	0.50	-0.08	0.04	-0.05	-2.20	0.028				
	Math Pre	2.61	0.84	-0.43	0.02	-0.44	-18.98	0.000				
	Perseverance Change	0.41	0.92	0.42	0.02	0.47	22.09	0.000				

N= 1212

Is change in *Self-Regulation* associated with change in **Math performance**?

Self- Regulation => Math

Students who showed more change in **Self-Regulation**, were also likely to improve their academic performance in Math.

Change in Self-Regulation was positively associated with change in Math scores.

The full model including demographic covariates, baseline Math scores, and change in Self-Regulation skills, significantly predicted change in Math scores (R^2 = .43, F(12, 2086) =131.31, p<.001).

Covariate Effects: Hispanic students, students in middle and high school, and students who are economically disadvantaged showed slightly lower change in Math relative to their comparison groups. Students who were receiving special education services showed less change in Math than students not receiving special education services. Students who started with lower Math scores, showed more change in Math than students who started with higher Math scores.

SEL Effects: The amount of change *Self-Regulation* skills is positively associated with the amount of change in **Math** (β= .36, p<.001). Students who showed more change in Self-Regulation skills were also likely to improve their academic performance in Math. This analysis suggests that change in Self-Regulation skills predicts change in Math beyond demographic characteristics and baseline Math scores.

Table 4.4. Self-Regulation -> Math: Descriptive Statistics and Parameters

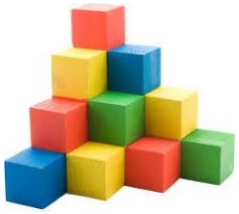
		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
Math Change		0.45	0.90									
Step 1	Demographics								0.04		10.80	0.000
	Female			-0.03	0.04	-0.02	-0.71	0.476				
	Black			0.01	0.06	0.00	0.17	0.867				
	Hispanic			0.24	0.05	0.13	4.89	0.000				
	Multi-Race			0.02	0.10	0.01	0.23	0.816				
	Asian			-0.10	0.08	-0.03	-1.22	0.223				
	in Middle School			0.22	0.05	0.10	4.70	0.000				
	In High School			-0.20	0.06	-0.07	-3.15	0.002				
	with Special Ed Services			0.03	0.05	0.01	0.54	0.589				
	Learning English			0.12	0.05	0.06	2.34	0.019				
	Economic Disadvantage			0.07	0.04	0.04	1.61	0.108				
Step 2	Baseline ELA								0.30	0.26	84.40	0.000
	Female			-0.03	0.03	-0.02	-0.99	0.323				
	Black			-0.09	0.05	-0.04	-1.75	0.080				
	Hispanic			0.12	0.04	0.07	2.89	0.004				
	Multi-Race			-0.08	0.09	-0.02	-0.95	0.344				
	Asian			0.13	0.07	0.04	1.87	0.062				
	in Middle School			0.17	0.04	0.08	4.19	0.000				
	In High School			-0.14	0.05	-0.05	-2.64	0.008				
	with Special Ed Services			-0.31	0.04	-0.14	-7.05	0.000				
	Learning English			-0.05	0.04	-0.02	-1.13	0.258				
	Economic Disadvantage			-0.07	0.04	-0.04	-1.90	0.058				
	Math Pre			-0.58	0.02	-0.56	-27.93	0.000				
Step 3	SAYO Change								0.43	0.12	131.31	0.000
	Female	53%	0.50	0.00	0.03	0.00	-0.05	0.960				
	Black	15%	0.36	-0.09	0.05	-0.04	-1.91	0.057				
	Hispanic	43%	0.50	0.15	0.04	0.08	3.99	0.000				
	Multi-Race	4%	0.20	-0.14	0.08	-0.03	-1.79	0.074				
	Asian	7%	0.26	0.09	0.06	0.03	1.37	0.171				
	in Middle School	24%	0.42	0.12	0.04	0.06	3.34	0.001				
	In High School	12%	0.33	-0.10	0.05	-0.04	-2.12	0.034				
	with Special Ed Services	20%	0.40	-0.30	0.04	-0.13	-7.46	0.000				
	Learning English	22%	0.41	-0.05	0.04	-0.02	-1.22	0.221				
	Economic Disadvantage	59%	0.49	-0.07	0.03	-0.04	-2.04	0.041				
	Math Pre	2.48	0.88	-0.49	0.02	-0.47	-25.34	0.000				
	Self Regulation Change	0.36	0.86	0.38	0.02	0.36	21.17	0.000				

N= 2099

5. Program Experiences Promote Youth Competence and Skills [SAYO-Y]

Program Experiences as building blocks to learning

- *Supportive Social Environment*
- *Supportive Adult*
- *Feeling Challenged*
- *Enjoyment/Engagement*
- *Leadership/Responsibility*



Based on research, theory, and practice we expect that when youth report positive program experiences, they also report higher competence & skills.

Program experiences are influential for competence and skill development.

- Each program experience represents a unique building block
- Different patterns in program experiences when supporting competence and skills
- Each block does a different amount of work in holding up the foundation

METHOD

This section includes student reports of **Program Experiences**, **Sense of Competence**, and retrospective reports of the **Academic and Social-Personal skills** that the program helped students to gain.

Covariates: The only demographic information collected was the grade and gender of students. In the full sample, 50% of students were in elementary school, 36% were in middle school, and 15% were in high school. Students identified their gender as 47% girl, 45% boy, and 3% non-binary.

Program Experiences: Program experiences include five areas: (1) Enjoyment/Engagement; (2) Feeling Challenged; (3) having a Supportive Adult; (4) perceiving a Supportive Social Environment; and (5) a sense of Leadership/Responsibility. Students responded to questions for each scale using 1 = No, 2 = Mostly No, 3 = Mostly Yes, and 4 = Yes. The highest average for the full sample was Enjoyment/Engagement. See Table 5.1 for descriptive information about Program Experiences scales in the full sample.

Sense of Competence: Students rated their Sense of Competence Learning and Sense of Competence with Peers on a scale of 1 = Don't Agree, 2 = Agree a Little, 3 = Mostly Agree, and 4 = Agree a Lot. Sense of Competence Learning had a higher average rating than the other competence scales in the full sample. See Table 5.1 for descriptive information about Sense of Competence scales in the full sample.

Retrospective Skills: Students also responded to questions in which they could retrospectively report if coming to the 21st CCLC program had helped them to build their Academic Skills and/or their Social-Personal Skills. Students responded to questions on each area on a scale of 1 = Don't Agree, 2 = Agree a Little, 3 = Mostly Agree, and 4 = Agree a Lot. Students reported slightly more of an influence on their Social-Personal Skills than their Academic Skills. See Table 5.1 for descriptive information about Retrospective Skills scales in the full sample.

Table 5.1: Descriptive Results for SAYO-Y Full Sample

	N	α	M	SD
Program Experiences				
Challenged	4369	0.79	3.14	0.78
Enjoyment/Engagement	4368	0.82	3.22	0.70
Leadership/Responsibility	4130	0.87	2.27	0.80
Supportive Adult	4345	0.80	3.18	0.72
Supportive Social Environment	4284	0.80	3.10	0.62
Sense of Competence				
Learning	4106	0.84	3.06	0.72
Peers	4192	0.84	2.79	0.81
Reading	3041	0.82	2.59	0.82
Writing	3000	0.85	2.51	0.85
Math	1158	0.93	2.62	0.97
Science	1157	0.94	2.86	0.93
Retrospective				
Academic Skills	4147	0.87	2.88	0.96
Social Person Skills	4145	0.84	2.99	0.92
SEL				
Goal Management	2038	0.86	2.83	0.63
Teamwork	2069	0.91	2.96	0.80

ANALYSIS PLAN

In order to evaluate the associations between Program Experiences and the outcomes of Sense of Competence and Retrospective Skills, Hierarchical Linear Regressions were conducted. The purpose of these analyses was to evaluate if youth ratings of Program Experiences related to youth-reported Competence and Skills. These hierarchical regressions were conducted in two steps. In the first step, gender and grade were evaluated, and in the second step all five program experiences scales were incorporated into the model.

Full results for each step of the four regression models are presented in Tables 5.2-5.5. In all analyses, the final model (Step 2) was the best predictor of the outcomes. Therefore, the results for the final and most useful models are presented below.

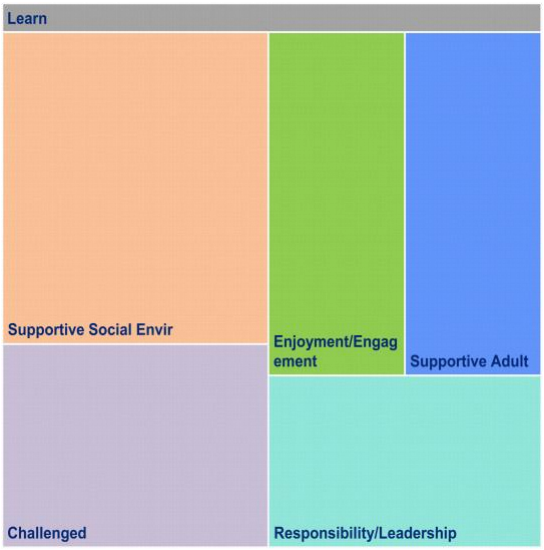
Are *Program Experiences* associated with **Sense of Competence Learning**?

Sense of Competence Learning

All program experiences had an influence.

Largest effects:

- Supportive Social Environment
- Challenged



The full model including grade, gender, and the five program experiences scales, significantly predicted Sense of Competence as a Learner (R^2 = .36, F(8, 3796) =270.75, p<.001).

Covariate Effects: Middle and High school students reported slightly lower competence than Elementary school students.

Program Experience Effects: Program Experiences were positively associated with Sense of Competence as a Learner. Youth who reported more positive program experiences were more likely to report a greater Sense of Competence as a Learner. All *Program Experience* scales were positively associated with **Sense of Competence as a Learner** and perceiving a *Supportive Social Environment* (β= .23, p<.001) had the largest association with Sense of Competence as a Learner. This analysis suggests that Program Experiences scales, particularly the Supportive Social Environment scale, are associated with Sense of Competence as a Learner, beyond grade and gender.

Table 5.2. Program Experiences -> Sense of Competence: Learning Descriptives and Parameters

		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
Sense of Competence - Learning		3.07	0.71									
Step 1	Demographics								0.01		17.75	0.000
	Female			-0.02	0.02	-0.01	-0.89	0.374				
	in Middle School			-0.15	0.03	-0.10	-5.89	0.000				
	in High School			0.07	0.03	0.04	2.13	0.033				
Step 2	Program Experiences								0.36	0.35	270.75	0.000
	Female	51%	0.50	-0.01	0.02	-0.01	-0.59	0.552				
	in Middle School	36%	0.48	-0.14	0.02	-0.09	-6.63	0.000				
	in High School	15%	0.35	-0.12	0.03	-0.06	-4.23	0.000				
	Enjoyment/Engagement	3.24	0.68	0.13	0.02	0.13	7.04	0.000				
	Feel Challenged	3.15	0.77	0.14	0.02	0.15	8.32	0.000				
	Supportive Adults	3.19	0.71	0.13	0.02	0.13	7.18	0.000				
	Supportive Social Environment	3.11	0.62	0.27	0.02	0.23	13.58	0.000				
	Responsbility/Leadership	2.28	0.80	0.12	0.01	0.13	8.14	0.000				

N= 3805

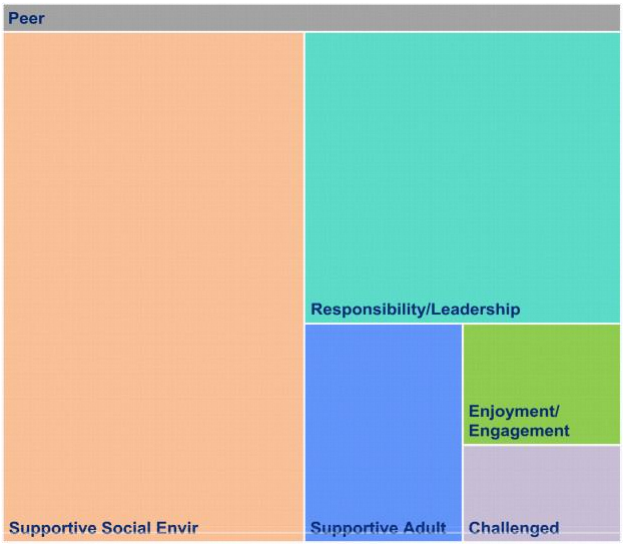
SENSE OF COMPETENCE WITH PEERS

Are *Program Experiences* associated with **Sense of Competence with Peers**?

All program experiences had an influence

Largest effects:

- Supportive Social Environment
- Responsibility/Leadership



The full model including grade, gender, and the five program experiences scales, significantly predicted Sense of Competence with Peers (R^2 = .43, F(8, 3846) =362.70 , p<.001).

Covariate effects: Students who identified as Girls, in Middle and High school reported slightly lower peer competence.

Program Experience Effects: Program Experiences scales were positively associated with Sense of Competence with Peers. Youth who reported more positive program experiences were more likely to report a greater Sense of Competence with Peers. All *Program Experience* scales were positively associated with **Peer Competence**. Perceiving a *Supportive Social Environment* (β= .40, p<.001) and a sense of *Leadership and Responsibility* (β= .24, p<.001) had the strongest association with Sense of Competence with Peers. Enjoyment/Engagement, Feeling Challenged, and having a Supportive Adult all had lower associations with Sense of

Competence with Peers. This analysis suggests that program experiences, particularly a Supportive Social Environment and sense of Leadership/Responsibility predict Sense of Competence with Peers, beyond grade and gender.

Table 5.3. Program Experiences -> Sense of Competence: Peers Descriptives and Parameters

		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
Sense of Competence - Peer		2.80	0.80									
Step 1	Demographics								0.01		16.61	0.000
	Female			-0.09	0.03	-0.05	-3.33	0.001				
	in Middle School			-0.05	0.03	-0.03	-1.67	0.095				
	in High School			0.20	0.04	0.09	5.10	0.000				
Step 2	Program Experiences								0.43	0.42	362.70	0.000
	Female	51%	0.50	-0.07	0.02	-0.04	-3.67	0.000				
	in Middle School	36%	0.48	-0.05	0.02	-0.03	-2.22	0.026				
	in High School	14%	0.35	-0.07	0.03	-0.03	-2.35	0.019				
	Enjoyment/Engagement	3.24	0.69	0.05	0.02	0.05	2.64	0.008				
	Feel Challenged	3.15	0.77	0.04	0.02	0.04	2.20	0.028				
	Supportive Adults	3.19	0.71	0.10	0.02	0.09	5.30	0.000				
	Supportive Social Environment	3.11	0.62	0.52	0.02	0.40	24.99	0.000				
	Responsbility/Leadership	2.27	0.80	0.24	0.02	0.24	15.98	0.000				

N= 3855

RETROSPECTIVE ACADEMIC SKILLS

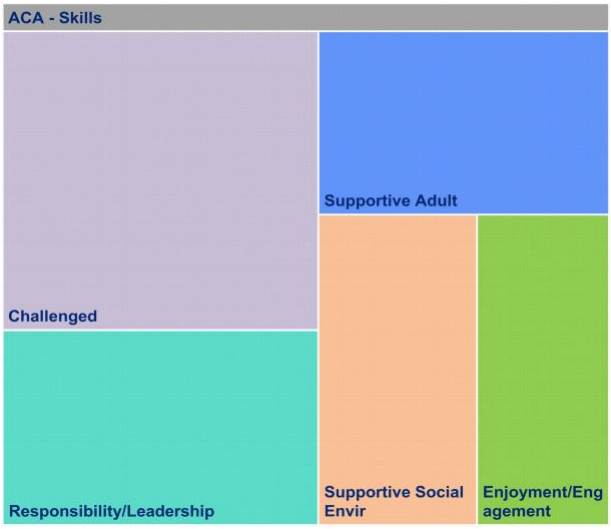
Are *Program Experiences* associated with youth-reported program impact on **Academic Skills**?

(Retrospective)

All program experiences had an influence

Largest effects:

- Challenged



The full model including grade, gender, and the five program experiences scales, significantly predicted Retrospective Academic Skills (R^2 = .35, F(8, 3886) =256.68 , p<.001).

Covariate Effects: Students in Middle School reported less of an impact on their Academic Skills.

Program Experience Effects: Program Experiences were positively associated with retrospective Academic Skills. Youth who reported more positive program experiences were more likely to report an influence of the 21st CCLC program on retrospective Academic Skills. All *Program Experience* scales were positively associated with **Academic Skills**. *Feeling Challenged* had the strongest association with Academic Skills (β= .23, p<.001). This analysis suggests that program experiences scales predict Academic Skills, beyond grade and gender.

Table 5.4. Program Experiences -> Retrospective Academic Skills: Descriptives and Parameters

		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
Retrospective Academic Skills		2.88	0.96									
Step 1	Demographics								0.03		45.54	0.000
	Female			-0.03	0.03	-0.01	-0.90	0.367				
	in Middle School			-0.29	0.03	-0.14	-8.74	0.000				
	in High School			0.21	0.04	0.08	4.61	0.000				
Step 2	Program Experiences								0.35	0.32	265.68	0.000
	Female	51%	0.50	-0.01	0.02	-0.01	-0.53	0.598				
	in Middle School	36%	0.48	-0.27	0.03	-0.13	-9.90	0.000				
	in High School	14%	0.35	-0.04	0.04	-0.02	-1.18	0.236				
	Enjoyment/Engagement	3.24	0.68	0.15	0.03	0.10	5.77	0.000				
	Feel Challenged	3.15	0.77	0.28	0.02	0.23	12.53	0.000				
	Supportive Adults	3.19	0.71	0.17	0.02	0.13	7.23	0.000				
	Supportive Social Environment	3.11	0.62	0.18	0.03	0.12	7.04	0.000				
	Responsbility/Leadership	2.27	0.80	0.18	0.02	0.15	9.69	0.000				

N= 3895

RETROSPECTIVE SOCIAL-PERSONAL SKILLS

Are *Program Experiences* associated with youth-reported program effects on **Social-Personal Skills**?

(Retrospective)

All program experiences had an influence

Largest effects:

- Supportive Social Environment
- Enjoyment/Engagement

The full model including grade, gender, and the five program experiences scales, significantly predicted retrospective Social-Personal Skills (R^2 = .47, F(8, 3884) =427.70 , p<.001).

Covariate Effects: Students who identified as girls, and who were in middle and high school reported a slightly lower influence on their Social-Personal Skills.

Program Experience Effects: Program Experiences were positively associated with Retrospective Social-Personal Skills. Youth who reported more positive program experiences were more likely to report an influence of the 21st CCLC program on their Social-Personal Skills. All *Program Experience* scales positively predicted **Social-Personal Skills**. A sense of *Enjoyment and Engagement* (β= .20, p<.001) in the program, and perceiving a *Supportive Social Environment* (β= .21, p<.001) had the strongest associations with Social-Personal Skills. This analysis suggests that program experiences scales predict Social-Personal Skills, beyond grade and gender.

Table 5.5. Retrospective Social-Personal Skills: Descriptives and Parameters

		M/%	SD	B	SE	β	t	p	R2	Δ R^2	F	p
Retrospective Social-Personal Skills		3.00	0.91									
Step 1	Demographics								0.02		24.07	0.000
	Female			-0.07	0.03	-0.04	-2.56	0.010				
	in Middle School			-0.16	0.03	-0.09	-5.17	0.000				
	in High School			0.18	0.04	0.07	4.25	0.000				
Step 2	Program Experiences								0.47	0.45	427.70	0.000
	Female	51%	0.50	-0.06	0.02	-0.03	-2.73	0.006				
	in Middle School	36%	0.48	-0.14	0.02	-0.08	-6.15	0.000				
	in High School	14%	0.35	-0.08	0.03	-0.03	-2.52	0.012				
	Enjoyment/Engagement	3.24	0.68	0.27	0.02	0.20	12.50	0.000				
	Feel Challenged	3.15	0.77	0.20	0.02	0.17	10.67	0.000				
	Supportive Adults	3.19	0.71	0.17	0.02	0.14	8.46	0.000				
	Supportive Social Environment	3.11	0.62	0.31	0.02	0.21	13.68	0.000				
	Responsbility/Leadership	2.27	0.80	0.16	0.02	0.14	9.93	0.000				

N= 3893

APPENDIX A: FY19 21st Century Community Learning Centers Grantees and Sites

Grantee	Site	ELT/ OST
Athol Area YMCA	Athol Community Elementary School	OST
Barnstable Public Schools	Hyannis West Elementary	OST
Berkshire Hills Regional School District	Muddy Brook Elementary	OST
Berkshire Hills Regional School District	Monument Valley Middle	OST
Boston Day and Evening Academy	Boston Day and Evening Academy	OST
Boston Public Schools	Eliot Innovation K-8	ELT
Boston Public Schools	Boston International High School / Newcomers Academy	ELT
Boston Public Schools	English High	OST
Boston Public Schools	Gardner Pilot	OST
Boston Public Schools	Thomas Kenny (K-5)	OST
Boston Public Schools	Hennigan Elementary	OST
Brockton Public Schools	Arnone Elementary	OST
Brockton Public Schools	Baker Elementary	OST
Brockton Public Schools	George Elementary	OST
Brockton Public Schools	Raymond K-8	ELT
Brockton Public Schools	Downey Elementary	OST
Brockton Public Schools	Brookfield Elementary	OST
Chelsea Public Schools	Chelsea High	OST
Collaborative for Educational Services	Maple Elementary (Easthampton)	OST
Collaborative for Educational Services	Pepin Elementary (Easthampton)	OST
Collaborative for Educational Services	Palmer Middle (formerly Converse)	OST
Collaborative for Educational Services	Amherst Regional Middle	OST
Collaborative for Educational Services	Sheffield Elementary (gr. 2-5)	OST
Collaborative for Educational Services	West Springfield High	OST
Collaborative for Educational Services	Easthampton High	OST
Collaborative for Educational Services	Greenfield High	OST
Collaborative for Educational Services	Memorial Elementary (West Springfield)	OST
Collaborative for Educational Services	Coburn Elementary (W. Springfield)	OST
Community Day Care Center (Lawrence)	Emily G. Wetherbee Elementary	OST
Community Day Care Center (Lawrence)	Community Day Arlington	OST
Community Day Care Center (Lawrence)	Alexander B. Bruce	OST
Community Day Care Center (Lawrence)	Frost Elementary	OST
Community Day Care Center (Lawrence)	John K. Tarbox School	OST
Community Day Care Center (Lawrence)	Parthum Elementary	OST
East End House, Inc. (Cambridge)	East End House (primarily serving Kennedy)	OST
Everett Public Schools	Lafayette	OST
Everett Public Schools	English	OST

Grantee	Site	ELT/ OST
Everett Public Schools	Parlin Elementary	OST
Everett Public Schools	Whittier Elementary	OST
Everett Public Schools	George Keverian Elementary (Gr. 2-6)	OST
Everett Public Schools	Webster Elementary	OST
Fall River Public Schools	Doran	OST
Fall River Public Schools	Morton Middle - ELT	ELT
Fall River Public Schools	Mary L. Fonseca Elementary	OST
Fall River Public Schools	Durfee High	OST
Fall River Public Schools	Talbot Innovation (formerly Talbot Middle)	OST
Fall River Public Schools	Greene Elementary	OST
Fall River Public Schools	Letourneau Elementary	ELT
Fitchburg Public Schools	South Street Elementary	OST
Fitchburg Public Schools	Longsjo Middle	OST
Fitchburg Public Schools	Crocker Elementary	OST
Fitchburg Public Schools	Memorial Middle	OST
For Kids Only	William A. Welch Elem (Peabody)	OST
For Kids Only	Center School (Peabody)	OST
For Kids Only	Frank M. Sokowlowski (Chelsea)	OST
Framingham Public Schools	Walsh Middle	OST
Framingham Public Schools	Fuller Middle	OST
Gloucester Public Schools	O'Maley Innovation Middle	OST
Haverhill Public Schools	Tilton	OST
Haverhill Public Schools	Golden Hill	OST
Haverhill Public Schools	Consentino K-4	OST
Haverhill Public Schools	John Greenleaf Whittier Middle	OST
Haverhill Public Schools	Haverhill High	OST
Haverhill Public Schools	Consentino Middle	OST
Holyoke Public Schools	Donahue (Gr. 5-8)	OST
Holyoke Public Schools	Peck Elementary	OST
Holyoke Public Schools	E.N. White Elementary	OST
Holyoke Public Schools	Holyoke High School	OST
Holyoke Public Schools	Kelly Full Service Community School	ELT
Holyoke Public Schools	Morgan Elementary	OST
Holyoke Public Schools	Lt. Elmer J. McMahon Elementary	OST
Lawrence Public Schools	Parthum Elementary	ELT
Lawrence Public Schools	Arlington Middle	ELT
Lawrence Public Schools	Guilmette Elementary	ELT
Lawrence Public Schools	Emily G. Wetherbee Elementary	ELT
Leominster Public Schools	Sky View Middle	OST
Leominster Public Schools	Samoset Middle	OST
Lowell Public Schools	Greenhalge Elementary	OST
Lowell Public Schools	Shaughnessy Elementary	OST
Lowell Public Schools	Stoklosa Middle	OST

Grantee	Site	ELT/ OST
Lowell Public Schools	Christa McAuliffe Elementary	OST
Lowell Public Schools	Abraham Lincoln Elementary School	OST
Lowell Public Schools	Robinson Middle	OST
Lowell Public Schools	Morey Elementary	OST
Lowell Public Schools	Bartlett Community Partnership	OST
Lowell Public Schools	Lowell High	OST
Lowell Public Schools	McAvinnue Elementary	OST
Malden Public Schools	Salemwood K-8	OST
Malden Public Schools	Forestdale K-5	OST
Malden Public Schools	Forestdale 6-8	OST
Malden Public Schools	Beebe 6-8	OST
Malden Public Schools	Beebe K-5	OST
Methuen Public Schools	Tenney Lower	OST
Methuen Public Schools	Timony Lower	OST
Methuen Public Schools	Methuen High	OST
New Bedford Public Schools	Gomes Elementary	OST
New Bedford Public Schools	Normandin Middle	OST
New Bedford Public Schools	Hayden-McFadden Elementary	ELT
New Bedford Public Schools	Normandin Middle	ELT
New Bedford Public Schools	Jacobs (formerly Hannigan Elementary)	OST
New Bedford Public Schools	Gomes Elementary	ELT
New Bedford Public Schools	Irwin Jacobs (formerly Hannigan Elementary)	ELT
North Adams Public Schools	Colegrove Park Elementary	OST
North Adams Public Schools	Brayton Elementary (serving K-5)	OST
North Brookfield Youth Center	North Brookfield Elementary	OST
Pittsfield Public Schools	Reid Middle	OST
Pittsfield Public Schools	Herberg Middle	OST
Pittsfield Public Schools	Morningside Community School	OST
Pittsfield Public Schools	Conte Community	OST
Pittsfield Public Schools	Crosby Elementary	OST
Quaboag Regional School District	Warren Elementary	OST
Quaboag Regional School District	Quaboag Innovation Middle	OST
Salem Public Schools	Collins Middle	OST
Salem Public Schools	Bowditch K-8	ELT
Salem Public Schools	Horace Mann Laboratory School	OST
Salem Public Schools	Bates Elementary	OST
Sociedad Latina	Timilty (Boston)	OST
Sociedad Latina	Mario Umana Academy (grades 6-8, Boston)	OST
South Shore Stars	Randolph Community Middle	OST
South Shore Stars	JFK Elementary (Randolph)	OST
South Shore Stars	Chapman Middle (Weymouth)	OST

Grantee	Site	ELT/ OST
South Shore Stars	Randolph High	OST
Springfield Department of Parks, Buildings and Rec.	Mary O. Pottenger Elementary (Springfield)	OST
Springfield Public Schools	Alfred G. Zanetti Montessori	OST
Taunton Public Schools	Taunton Alternative High	OST
Taunton Public Schools	Parker Middle	OST
Triton Regional School District	Salisbury Elementary	OST
Waltham Boys & Girls Club	Whittmore Elementary (Waltham)	OST
Wareham Public Schools	Minot Forest Elementary (serving Gr. 3-4)	OST
Wareham Public Schools	Wareham High	OST
Wareham Public Schools	Wareham Middle	OST
Wareham Public Schools	Decas Elementary	OST
Webster Public Schools	Park Ave. Elementary	OST
Whitman-Hanson Regional School District	Whitman-Hanson Regional High	OST
Winthrop Public Schools	Cummings Elementary	OST
Woburn Boys and Girls Club	Altavesta Elementary	OST
Woburn Boys and Girls Club	Shamrock Elementary	OST
Worcester Public Schools	Sullivan Middle	OST
Worcester Public Schools	Burncoat Middle School	OST
Worcester Public Schools	Claremont Academy	OST
YWCA of Malden	Ferryway (gr. 6-8, Malden)	OST
YWCA of Malden	Ferryway Elementary	OST

APPENDIX B: FY19 MA ESE21CLCC Report: Enhanced Programs for Students on an IEP Grant

Introduction

The purpose of the Enhanced Programs for Students on an IEP grant program is to enhance the capacity of 21st Century Community Learning Center (CCLC) out-of-school time (OST) programs to include and support students on an Individual Education Plan (IEP) in gaining the knowledge and skills to prepare themselves effectively for postsecondary opportunities, career training options, economically viable careers, and healthy, productive lives.

This report focuses on students in MA 21st CCLC programs who receive special education services[i]. The analyses in this report document Social Emotional Learning (SEL) and Skill development as reported by teachers during FY19. These analyses respond to two research questions:

1. Are MA 21st CCLC students who are enrolled in special education services developing their SEL skills?
2. Is there a difference in SEL skill development for students who receive the Enhanced Programs for Students Grant and students who do not receive this grant?

Sample

The sample for this research is the 3310 students in MA 21st CCLC programs who are on an IEP. Of these students approximately 450 (13%) are enrolled in programs that receive the Enhanced Programs for Students on an IEP (EPS) Grant.

Table 1 shows the number of students in each demographic category, and the proportion of students within that category who are served by the EPS Grant[ii]. For example, of the 327 Black students who are on an IEP, 6% benefit from the EPS Grant. Similarly, a total of 969 students are learning English, and 13% of these students benefit form the EPS Grant.

Table 1: Participation in SNS Grant within demographic group

	SP Only		SP + EPS Grant		Total
	N	%	N	%	
Asian	58	64%	33	36%	91
Black	308	94%	19	6%	327
Hispanic	1388	85%	247	15%	1635
MultiRacial	102	88%	14	12%	116
White	998	88%	137	12%	1135
Not Learning English	2015	86%	326	14%	2341
Learning English	845	87%	124	13%	969
Female	1080	87%	165	13%	1245
Male	1779	86%	285	14%	2064
Elementary	1770	84%	337	16%	2107
Middle	820	88%	109	12%	929
High	266	99%	4	1%	270

Note: This table should be read horizontally (from left to right).
SP = Receiving Special Education Services

EPS Grant = Served by EPS Grant

Table 2 shows the number of students in each demographic category, and the proportion of students across these categories who benefit from the EPS Grant. For example, of the programs that receive the EPS grant, 37% of the students are female and 63% male and 75% are Elementary Schools.

Table 2: Participation in EPS Grant across groups

	SP Only		SP + EPS Grant		Total
	N	%	N	%	
Asian	58	2%	33	7%	91
Black	308	11%	19	4%	327
Hispanic	1388	49%	247	55%	1635
Multi-Racial	102	4%	14	3%	116
White	998	35%	137	30%	1135
Not Learning English	2015	70%	326	72%	2341
Learning English	845	30%	124	28%	969
Female	1080	38%	165	37%	1245
Male	1779	62%	285	63%	2064
Elementary	1770	62%	337	75%	2107
Middle	820	29%	109	24%	929
High	266	9%	4	1%	270

Note: This table should be read vertically (from top to bottom).
SP = Receiving Special Education Services
EPS Grant = Served by EPS Grant

Method and Analysis

These analyses utilize teacher-reported data from the Survey of Academic and Youth Outcomes Tool (SAYO), collected during FY19.

Group Comparisons: These comparisons were analyzed through a Repeated Measures ANOVA which assesses mean differences over time and between groups. Through this analysis, we assess: (1) if there is within group change over time (main effect); (2) if there are between-group differences over time (group effect); and (3) if the groups are changing in different ways over time (interaction). Each SAYO outcome was evaluated separately. Covariates were included in these models to account for race, gender, income, grade, and language differences.

Analyses on Critical Thinking, Perseverance, and Leadership were not conducted because of notably unequal sample sizes. There is not enough data available about students served by the EPS Grant in these areas to make a reasonable comparison.

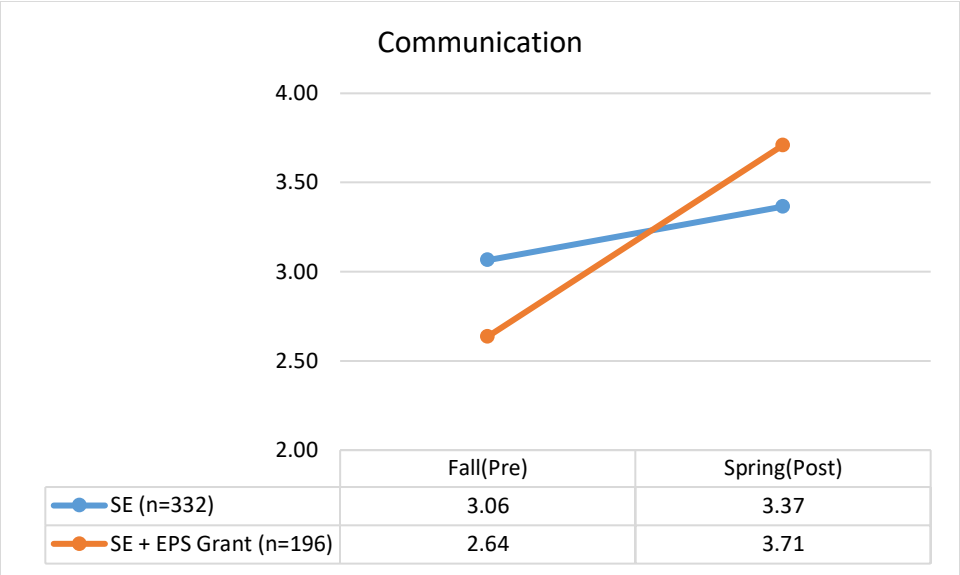
Results

Communication

There is a *time*group effect* $F(1,517)=56.61$, $p<.001$, for Communication.

Overall, students' scores in Communication increased over the school year. On average, students served by the EPS Grant had notably lower scores than their peers at the beginning of

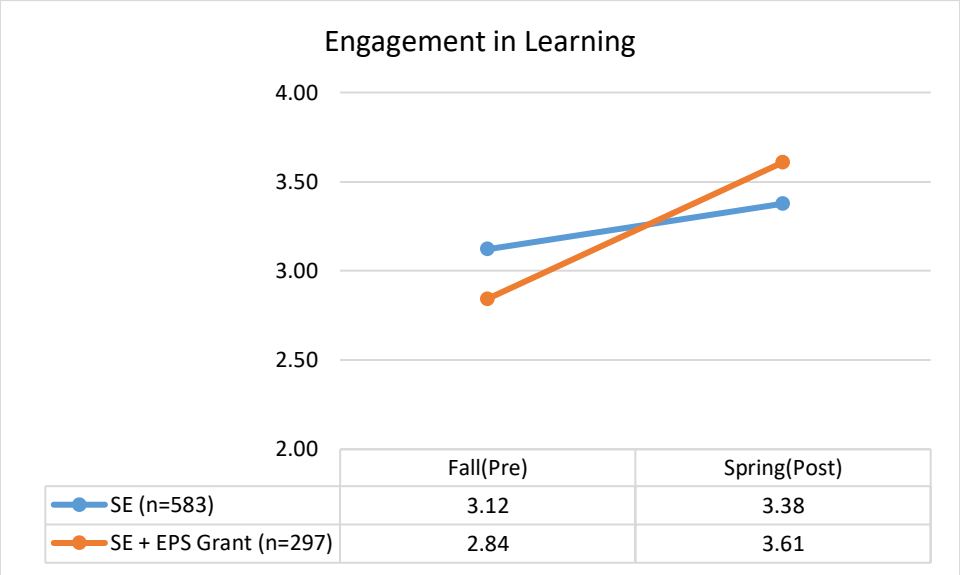
the school year and by the end of the school year their communication skills had surpassed their peers.



Engagement in Learning

There is a *time*group effect* F(1, 869)= 63.71, p<.001 for Engagement in Learning.

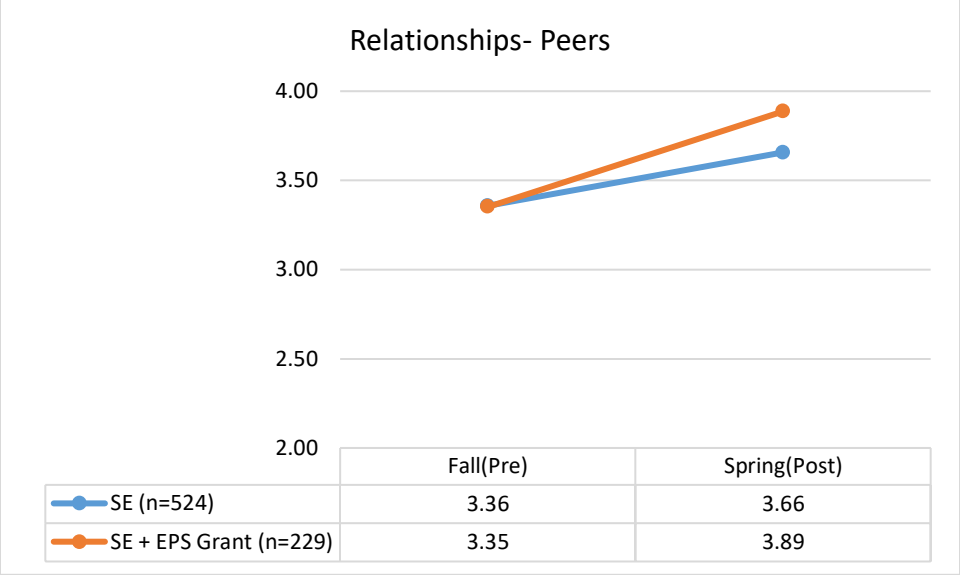
Overall, students' scores in Engagement in Learning increased over the school year. On average, students served by the EPS Grant showed more growth over the school year with scores starting lower and ending higher than their peers.



Relationships – Peers

There is a *time*group effect* F(1, 742)=7.05, p=.008, for Relationships with Peers.

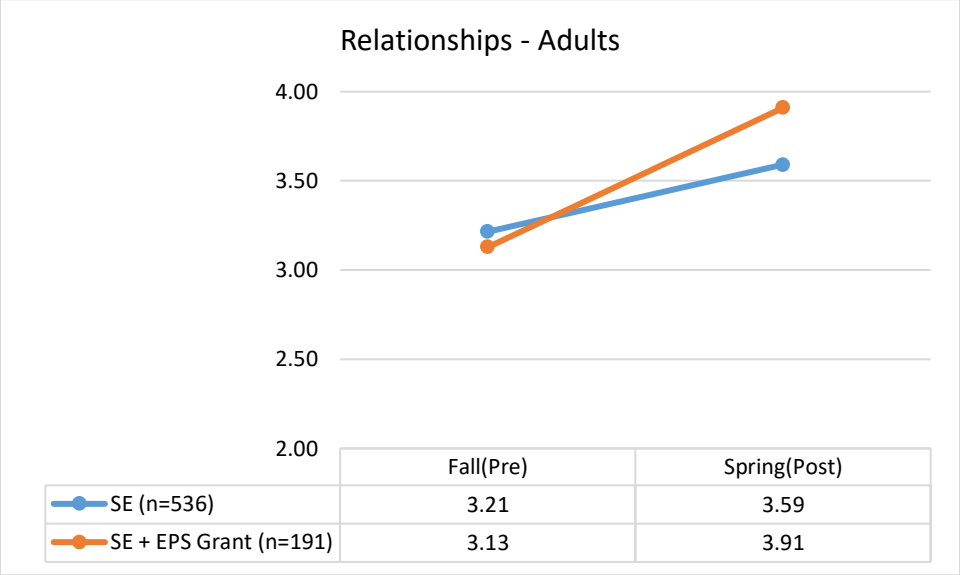
Overall, students' scores in Relationships with Peers increased over the school year. On average, students served by the EPS Grant started with the same score as their peers, but showed more growth in relationships with peers over the course of the year.



Relationships – Adults

There is a *time*group effect* F(1, 716)=12.50, p<.001, for Relationships with Adults.

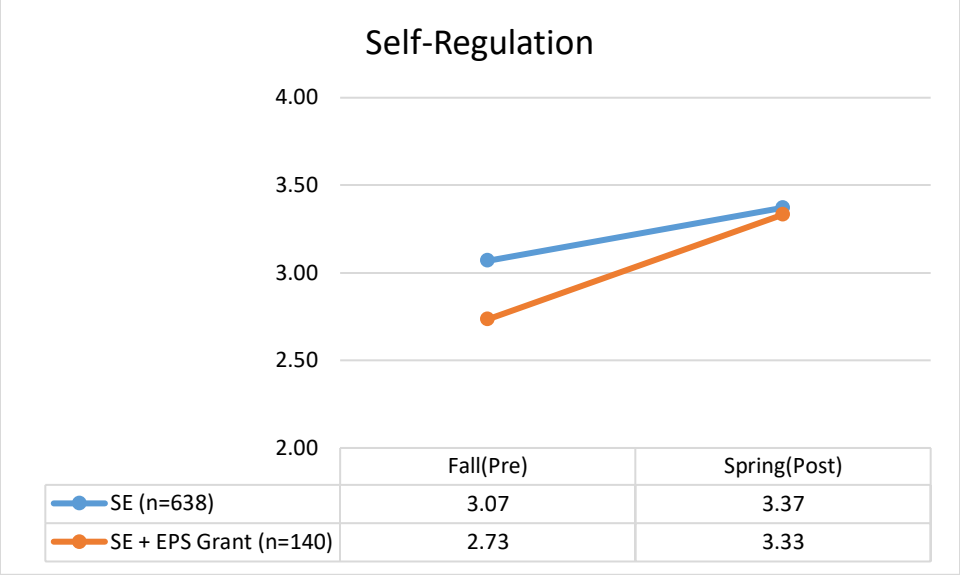
Overall, students' scores in Relationships with Adults increased over the school year. On average, students served by the EPS Grant started at the same level as their peers, but showed more growth in these skills.



Self-Regulation

There is a *time*group effect* F(1, 767) = 12.09, p=.001, for Self-Regulation.

Overall, students' scores in Self-Regulation increased over the school year. On average, students served by the EPS Grant started the school year with lower Self-Regulation scores and by the end of the school year their scores matched those of their peers.



[i] This report was created by the National Institute on Out-of-School Time at the Wellesley Centers for Women at Wellesley College. Questions about the analyses in this report can be directed to Lisette DeSouza, Ph.D., lisette.desouza@wellesley.edu

[ii] When SAYO and 21st CCLC data are collected, whether the student is identified as being served by the enhancement grant is documented as an open-ended text response. If this response included "Y", "Yes", or "X" this was considered indication that this student was served by the EPS Grant. If text was entered which did not include these responses (e.g., "No," or other unrelated text), then these cases were considered to not have been served by the enhancement grant. It is possible that some students were mis-specified during this coding process, however these numbers would be low and not sufficient to change the meaning of the analyses included in this report.